

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of operating a radio network comprising a primary station (PS) and a plurality of secondary stations (SS1, SS2, SS3), wherein the primary station determines ~~the~~ a level of interest by users of secondary stations in a service by ~~allocating at least one~~ providing a plurality of random access slots ~~in which a secondary station can transmit an indication of its interest~~ that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations.

2. (Currently Amended) ~~[[A]]~~ The method as claimed in claim 1, wherein the primary station estimates the level of interest from ~~the~~ a number of transmitted indications and selects a transmission mode of the service in dependence on whether the level of interest is relatively high or relatively low.

3. (Currently Amended) ~~[[A]]~~ The method as claimed in claim 2, wherein the transmission mode for a the relatively high level of interest is point-to-multipoint.

4. (Currently Amended) [[A]] The method as claimed in claim 2, wherein the transmission mode for a the relatively low level of interest is point-to-point.

5. (Currently Amended) [[A]] The method as claimed in claim 2, wherein the primary station sets a threshold level for determining the transmission mode of the service and, when the number of transmitted indications exceeds the threshold level, the transmission mode for the relatively high level of interest is operated.

6. (Currently Amended) [[A]] The method as claimed in claim 1, wherein each access slot ~~is characterised by~~ of the plurality of random access slots includes a combination of one time slot and one signature, and wherein the primary station maps each of the plurality of random access slots to a different service such that all the secondary stations interested in one service transmit using one of a plurality of random access slots, and in that each combination of one time slot and one signature is contained in not more than one of the ~~pluralities~~ plurality of random access slots.

7. (Currently Amended) [[A]] The method as claimed in claim 6, wherein each of the plurality of random access slots ~~is characterised in that each access slot in the plurality~~ uses the same signature and in that each random access slot in the plurality of random access slots uses a different time slot.

8. (Currently Amended) [[A]] The method as claimed in claim 6, wherein each of the plurality of random access slots ~~is characterised in that each access slot in the plurality~~ uses the same time slot and in that each random access slot in the plurality of random access slots uses a different signature.

9. (Currently Amended) [[A]] The method as claimed in claim 1, wherein a secondary station of the plurality of secondary stations indicates ~~it's~~ the level of interest by transmitting a predetermined signal in a preselected one of a plurality of random access slots.

10. (Cancelled)

11. (Currently Amended) [[A]] The method as claimed in claim 1, wherein the ~~indications of interest are~~ level of interest is transmitted as spread spectrum signals and ~~the~~ a number of indications is estimated by estimating ~~the~~ a number of correlation peaks in a given random access time slot.

12. (Currently Amended) [[A]] The method as claimed in claim 1, wherein the ~~indications of interest are~~ level of interest is transmitted as spread spectrum signals and ~~the~~ a number of indications is estimated by estimating ~~the~~ a received energy in a given random access slot.

13. (Currently Amended) [[A]] The method as claimed in claim 1, wherein the secondary stations are allocated to a respective one of two or more pluralities of access slots and in that a secondary station ~~wishing~~ of the plurality of secondary stations desiring to transmit an indication of interest, transmits in its allocated plurality of random access slots.

14. (Currently Amended) [[A]] The method as claimed in claim 13, wherein when ~~the~~ an estimated level of interest exceeds a predetermined level of interest, the primary station instructs the plurality of secondary stations waiting to transmit in their allocated access slot not to transmit.

15. (Currently Amended) [[A]] The method as claimed in claim 1, wherein a secondary station of the plurality of secondary stations indicating an interest in a the service also indicates a quality level for receiving the service.

16. (Currently Amended) [[A]] The method as claimed in claim 15, wherein the primary station transmits a higher quality level of service in a mode different from the transmission of a lower quality level of service.

17. (Currently Amended) [[A]] The method as claimed in claim 1, ~~characterised in that~~ wherein the primary station transmits a basic data stream as a point-to-multipoint transmission and a supplementary data stream for enhancing ~~the~~ a quality of the basic

data stream as a point-to-point transmission.

18. (Currently Amended) A radio network comprising a primary station (PS) and a plurality of secondary stations (SS1, SS2, SS3), wherein the primary station (PS) includes means (14) for determining the a level of interest by users of secondary stations in a service, ~~said means adapted to allocate a plurality of access slots in which a secondary station can transmit an indication of its interest.~~ the means providing a plurality of random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations.

19. (Currently Amended) [[A]] The radio network as claimed in claim 18, further comprising estimating means (17) for estimating the level of interest from ~~the a~~ number of transmitted indications and mode selection means (18) for selecting a transmission mode of the service in dependence on whether the level of interest is relatively high or relatively low.

20. (Currently Amended) [[A]] The radio network as claimed in claim 18, wherein each random access slot ~~is characterised by~~ includes a combination of one time slot and one signature, wherein the primary station (PS) comprises means (14, 19) for mapping each of the plurality of random access slots to a different service such that all the secondary stations interested in one service transmit using one of a plurality of random access slots, and wherein each combination of one time slot and one signature is

contained in not more than one of the ~~pluralities~~ plurality of random access slots.

21. (Currently Amended) [[A]] The radio network as claimed in claim 18, further comprising spread spectrum transceiving means (10, 22) and wherein the an estimating means (17) is adapted to estimate the level of interest by estimating ~~the~~ a number of correlation peaks in a respective random access slot.

22. (Currently Amended) [[A]] The radio network as claimed in claim 18, further comprising spread spectrum transceiving means (10, 22) and wherein the an estimating means (17) is adapted to estimate the level of interest by estimating ~~the~~ a received energy in a respective random access slot.

23. (Currently Amended) A primary station for use in a radio network comprising at least one primary station (PS) and a plurality of secondary stations (SS1, SS2, SS3), wherein the primary station (PS) includes means (14) for determining ~~the~~ a level of interest by users of secondary stations in a service, ~~said means adapted to allocate a plurality of access slots in which a secondary station can transmit an indication of its interest.~~ the means providing a plurality of random access slots that are selectively configured for permitting a temporary or permanent allocation of a portion of the plurality of random access slots based on the level of interest of the users of the secondary stations.

24. (Currently Amended) A secondary station for use in a radio network comprising a primary station (PS) and a plurality of the secondary stations (SS1, SS2,

SS3), wherein the primary station (PS) includes means (14) for determining the a level of
interest by users of secondary stations in a service, ~~said means adapted to allocate a~~
~~plurality of access slots in which a secondary station can transmit an indication of its~~
~~interest, wherein the secondary station (SS1, SS2, SS3) has means (26, 22) for indicating~~
~~its interest in the service by transmitting a predetermined signal in selected one of the~~
~~plurality of access slots.~~ the means providing a plurality of random access slots that are
selectively configured for permitting a temporary or permanent allocation of a portion of
the plurality of random access slots based on the level of interest of the users of the
secondary stations.